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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/035,620

Applicant(s)

SATAPATHY ET AL.

Examiner

TEMICA M. BEAMER

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4-36, 39-50 and 52-66 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 36, 39-50 and 52-66 is/are allowed.
- 6) ☒ Claim(s) 1, 4-6, 13-21, 23, 24 and 26-35 is/are rejected.
- 7) ☒ Claim(s) 7-12, 22 and 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Allowable Subject Matter

1. The indicated allowability of claims 1 and 4-36 is withdrawn in view of the newly discovered reference(s) to Hanley, U.S. Patent No. 6,097,966 and Gerszberg et al (Gerszberg), U.S. Patent Pub. No. 2003/0142664. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 4, 6, 15-21, 23, 24, 26-28 and 30-35 are rejected under 35

U.S.C. 102(b) as being anticipated by Hanley.

Regarding claims 1 and 27, Hanley discloses a system for multiple access comprising: an access device (mobile node 101) comprising an antenna (col. 3, lines 55-60, col. 5, lines 37-41) and a wireline communication port (col. 3, lines 55-60; figure 1); a wireline switch (LEC, s120-123) configured to communicate with the access device using a first wireline communication and a second wireline communication (col. 4, lines 19-31); and a wireless switch (base stations 105-108) configured to communicate with the access device using a first wireless communication and a second wireless communication (col. 3, lines 55-60); wherein the access device is configured to receive

the first wireline communication via the wireline communication port, to transmit the second wireline communication via the wireline communication port, to receive the first wireless communication via the antenna, and to transmit the second wireless communication via the antenna (col. 3, lines 14-44, col. 4, lines 19-52).

Regarding claim 4, Hanley discloses the system of claim 1 wherein at least one of the first and second wireless communications comprises at least one member of a group consisting of a multipoint multichannel distribution service spectrum communication, a code division multiplex access communication, a personal communication service communication, an unlicensed personal communications service spectrum communication, an industrial scientific medical spectrum communication, an unlicensed national information infrastructure spectrum communication, and a satellite service communication (col. 3, lines 36-44).

Regarding claim 6, Hanley discloses the system of claim 1 wherein the access device and the wireless switch are not within line of sight (figure 1).

Regarding claim 15, Hanley discloses the system of claim 1 wherein the wireline switch comprises at least one member of a group consisting of a local exchange carrier switch and an interexchange carrier switch (col. 3, lines 21-28).

Regarding claim 16, Hanley discloses the system of claim 1 wherein the access device is inherently configured to process at least one of the first and second wireless communications with at least one member of a group consisting of encryption, decryption, encoding, decoding, multiplexing, de-multiplexing, modulation, and demodulation (col. 3, lines 14-67).

Regarding claim 17, Hanley discloses the system of claim 1 wherein the access device is inherently configured to process at least one of the first and second wireline communications with at least one member of a group consisting of encryption, de-encryption, encoding, decoding, multiplexing, de-multiplexing, modulation, and demodulation (col. 3, lines 14-67).

Regarding claim 18, Hanley discloses the system of claim 1 wherein the wireless switch is inherently configured to process at least one of the first and second wireless communications with at least one member of a group consisting of encryption, de-encryption, encoding, decoding, multiplexing, de-multiplexing, modulation, and demodulation (col. 3, lines 14-67).

Regarding claim 19, Hanley discloses the system of claim 1 wherein the wireline switch is inherently configured to process at least one of the first and second wireline communications with at least one member of a group consisting of encryption, de-encryption, encoding, decoding, multiplexing, de-multiplexing, modulation, and demodulation (col. 3, lines 14-67).

Regarding claim 20, Hanley discloses the system of claim 1 further comprising a service node configured to communicate with the wireless switch (figure 1).

Regarding claim 21, Hanley discloses the system of claim 20 wherein the service node is configured to communicate with the wireless switch using at least one member of a group consisting of a third wireless communication and a third wireline communication (figure 1).

Regarding claim 23, Hanley discloses the system of claim 1 further comprising a service node configured to communicate with the wireline switch (figure 1).

Regarding claim 24, Hanley discloses the system of claim 23 wherein the service node is configured to communicate with the wireline switch using at least one member of a group consisting of a third wireless communication and a third wireline communication (figure 1).

Regarding claim 26, Hanley discloses the system of claim 1 wherein each of the first and second wireless communications comprises a first service type communication and each of the first and second wireline communications comprises a second service type communication (col. 3, lines 14-44).

Regarding claim 28, Hanley discloses the system of claim 27 wherein the first set of communications are formatted as a plurality of wireline Communications, and the wireline switch is configured to transmit the plurality of wireline communications to the access device (figure 1).

Regarding claim 30, Hanley discloses the system of claim 27 wherein the second set of communications are formatted as a plurality of wireless communications, and the wireless switch is configured to transmit the plurality of wireless communications to the access device (figure 1).

Regarding claim 31, Hanley discloses the system of claim 27 further comprising a premises equipment wherein the access device is configured to format the wireless communication to a digital communication and to transmit the digital communication to the premises equipment (figure 1).

Regarding claim 32, Hanley discloses the system of claim 31 wherein the digital communication comprises voice based data, and the premises equipment is configured to format the digital communication as an analog communication for voice access (figure 1).

Regarding claim 33, Hanley discloses the system of claim 27 further comprising a premises equipment. wherein the wireless communication comprises voice-based data, and the access device is configured to format the wireless communication to an analog communication for voice access and to transmit the analog communication to the premises equipment (figure 1).

Regarding claim 34, Hanley discloses the system of claim 27 wherein the first set of communications comprises data representative of at least one member of a group consisting of voice-based data, internet protocol data, digital data, video data, and media data (figure 1).

Regarding claim 35, Hanley discloses the system of claim 27 wherein the second set of communications comprises data representative of at least one member of a group consisting of voice-based data, internet protocol data, digital data, video data, and media data (figure 1).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5, 13, 14 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanley in view of Gerszberg.

Regarding claims 5, 13, 14 and 29, Hanley discloses the system of claims 1 and 27 as described above and further discloses wherein various types of communications can be used in the system. Hanley, however, fails to disclose wherein at least one of the first and second wireline communications comprises at least one member of a group consisting of a digital subscriber line based communication (modem) and a hybrid fiber coaxial based communication.

In a similar field of endeavor, Gerszberg discloses a network server platform for a hybrid coaxial/twisted pair local loop network service architecture. Gerszberg further discloses wherein at least one of the first and second wireline communications comprises at least one member of a group consisting of a digital subscriber line based communication (modem) and a hybrid fiber coaxial based communication (0043, 0051).

At the time of invention, it would have been obvious to a person of ordinary skill in the art to modify Hanley with the teachings of Gerszberg for the purpose of providing diverse services for subscribers.

Allowable Subject Matter

6. Claims 7-12, 22 and 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claims 36, 39-50 and 52-66 are allowed.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TEMICA M. BEAMER whose telephone number is (571)272-7797. The examiner can normally be reached on Monday-Thursday (alternate Fridays) 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Temica M. Beamer/
Primary Examiner, Art Unit 2617

A system for multiple access comprising:

an access transceiver comprising an antenna and a wireline communication port, wherein the access transceiver is configured to communicate using a wireline communication and a wireless communication;

a medium access control layer configured to control access to the access transceiver for communicating the wireline communication and the wireless communication;

a service hub configured to communicate first data for the wireline communication and a second data for the wireless communication for at least one premises communication;

and

a multiplexer configured to demultiplex the wireline communication and the wireless communication, and process the wireline communication and the wireless communication with an inverse multiplex asynchronous transfer mode protocol to generate another communication.

37. (CANCELED)

38. (CANCELED)

39. (PREVIOUSLY PRESENTED) The system of claim 36 further comprising a multiplexer configured to multiplex at least one member of a group consisting of the first data and the second data.

40. (ORIGINAL) The system of claim 39 wherein the multiplexer is configured to process the first data and the second data with an inverse multiplex asynchronous transfer mode protocol to generate the wireline communication and the wireless communication.

41. (PREVIOUSLY PRESENTED) The system of claim 36 further comprising a modulator configured to modulate data from the premises communication for generation of at least one member of a group consisting of the wireline communication and the wireless communication.

42. (PREVIOUSLY PRESENTED) The system of claim 36 further comprising a modulator configured to demodulate data from at least one member of a group consisting of the wireline communication and the wireless communication for generation of the premises communication.

43. (PREVIOUSLY PRESENTED) The system of claim 36 wherein the access transceiver comprises at least one member of a group consisting of a plain old telephone service port, a digital subscriber line port, a hybrid fiber coaxial port, and an antenna.

44. (PREVIOUSLY PRESENTED) The system of claim 36 further comprising a premises equipment comprising at least one member of a group consisting of a computer, a telephone, a set top box, and a narrowband device.

45. (CURRENTLY AMENDED) The system of claim 36 wherein the access transceiver is configured to transmit or receive the wireline communication via the wireline

communication port and the wireless communication via the antenna.

46. (ORIGINAL) The system of claim 36 wherein the medium access control layer further is configured to control a resource for combining first data from the wireline communication and second data from the wireless communication to another communication.

47. (ORIGINAL) The system of claim 36 wherein the service hub is configured to transmit or receive the premises communication.

48. (CURRENTLY AMENDED) A method for multiple access comprising:
configuring a wireline switch to communicate using a wireline communication;
configuring a wireless switch to communicate using a wireless communication;
configuring an access device comprising an antenna and a wireline communication port to engage in the wireline communication to communicate via the wireline communication port with the wireline switch and to engage in the wireless communication via the antenna to communicate with the wireless switch; and
using an inverse multiplex asynchronous transfer mode protocol to process at least one member of a group consisting of the wireless communication and the wireline communication.

49. (ORIGINAL) The method of claim 48 further comprising receiving the wireless communication from the wireless switch at the access device and receiving the wireline communication from the wireline switch at the access device.

50. (ORIGINAL) The method of claim 48 further comprising transmitting the wireless

communication to the wireless switch from the access device and transmitting the wireline communication to the wireline switch from the access device.

51. (PREVIOUSLY CANCELED)

52. (ORIGINAL) The method of claim 48 further comprising receiving the wireless communication, receiving the wireline communication, and using an inverse multiplex asynchronous transfer mode protocol to combine data from the wireless communication and other data from the wireline communication to form a premises communication.

53. (ORIGINAL) The method of claim 52 further comprising receiving the premises communication at a premises equipment from the access device.

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54. (ORIGINAL) The method of claim 48 further comprising using an inverse multiplex asynchronous transfer mode protocol to process a first portion of data for transmission in the wireless communication and to process a second portion of data for transmission in the wireline communication

55. (ORIGINAL) The method of claim 54 further comprising transmitting a premises communication to the access device from a premises equipment, the premises communication comprising the first portion of data and the second portion of data.

56. (PREVIOUSLY PRESENTED) The method of claim 48 further comprising processing the wireless communication at the access device with at least one member of a group consisting of encryption, de-encryption, encoding, decoding, multiplexing, de-multiplexing, modulation, and demodulation.

57. (PREVIOUSLY PRESENTED) The method of claim 48 further comprising processing the wireline communication at the access device with at least one member of a group consisting of encryption, de-encryption, encoding, decoding, multiplexing, de-multiplexing, modulation, and demodulation.

58. (PREVIOUSLY PRESENTED) The method of claim 48 further comprising processing the wireless communication at the wireless switch with at least one member of a group consisting of encryption, de-encryption, encoding, decoding, multiplexing, de-multiplexing, modulation, and demodulation.

59. (PREVIOUSLY PRESENTED) The method of claim 48 further comprising processing the wireline communication at the wireline switch with at least one member of a group consisting of encryption, de-encryption, encoding, decoding, multiplexing, de-multiplexing, modulation, and demodulation.

60. (ORIGINAL) The method of claim 48 further comprising communicating between a service node and the wireless switch.

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61. (PREVIOUSLY PRESENTED) The method of claim 60 further consisting of communicating using at least one member of a group comprising a wireless communication and a wireline communication.

62. (ORIGINAL) The method of claim 61 further comprising communicating using an inverse multiplex asynchronous transfer mode protocol to process a portion of data for transmission to the wireless switch.

63. (ORIGINAL) The method of claim 48 further comprising communicating between a service node and the wireline switch.

64. (PREVIOUSLY PRESENTED) The method of claim 63 further comprising communicating using at least one member of a group consisting of a wireless communication and a wireline communication.

65. (ORIGINAL) The method of claim 63 further comprising communicating using an inverse multiplex asynchronous transfer mode protocol to process a portion of data for transmission to the wireline switch.

66. (ORIGINAL) The method of claim 48 wherein the wireless communication comprises a first service type communication and the wireline communication comprises a second service type communication.

5. (PREVIOUSLY PRESENTED) The system of claim 1 wherein at least one of the first and second wireline communications comprises at least one member of a group consisting of a digital subscriber line based communication and a hybrid fiber coaxial based communication.

7. (PREVIOUSLY PRESENTED) The system of claim 1 wherein the access device is configured to process at least one member of a group consisting of the first and second wireless communications and the first and second wireline communications using an inverse multiplex asynchronous transfer mode protocol.

8. (PREVIOUSLY PRESENTED) The system of claim 7 wherein the processing using inverse multiplex asynchronous transfer mode protocol comprises at least one member

of a group consisting of multiplexing and de-multiplexing.

9. (PREVIOUSLY PRESENTED) The system of claim 1 wherein the access device further is configured to use an inverse multiplex asynchronous transfer mode protocol to combine data from the first wireless communication and other data from the first wireline communication to form a premises communication.

10. (ORIGINAL) The system of claim 9 further comprising a premises equipment configured to receive the premises communication from the access device.

11. (PREVIOUSLY PRESENTED) The system of claim 1 wherein the access device is configured to use an inverse multiplex asynchronous transfer mode protocol to process a first portion of data for transmission in the second wireless communication and to process a second portion of data for transmission in the second wireline communication.

12. (ORIGINAL) The system of claim 11 further comprising a premises equipment configured to transmit a premises communication to the access device, the premises communication comprising the first portion of data and the second portion of data.

13. (ORIGINAL) The system of claim 1 wherein the access device comprises a digital subscriber line modem.

14. (ORIGINAL) The system of claim 1 wherein the wireline switch comprises a digital

subscriber line access multiplexer.

22. (ORIGINAL) The system of claim 20 wherein the service node is configured to use an inverse multiplex asynchronous transfer mode protocol to process a portion of data for transmission to the wireless switch.

25. (ORIGINAL) The system of claim 23 wherein the service node is configured to use an inverse multiplex asynchronous transfer mode protocol to process a portion of data for transmission to the wireline switch.

29. (ORIGINAL) The system of claim 27 wherein the wireline switch comprises a digital subscriber line access multiplexer, and the digital subscriber line access multiplexer is configured to multiplex the first set of communications as at least one digital subscriber line wireline communication.